

WHAT IS CLAIMED IS:

1. A suture passer comprising:

a longitudinally extending hollow cannula having a central passage slidably receivable of a surgical suture;

a manually graspable handle adapted to engage said hollow cannula for manipulation thereof, said handle having a distal end, a proximal end, and an upper surface;

first suture guide means connected to said upper surface of said handle proximate to said distal end of said handle for releasably, guidingly holding said surgical suture;

second suture guide means connected to said upper surface of said handle proximal to said first suture guide means for releasably, guidingly holding said surgical suture; and

locking means for releasably, lockingly maintaining said cannula in a substantially fixed position relative to said handle.

2. A suture passer according to claim 1 further comprising means for disengaging said cannula from said handle.

3. A suture passer according to claim 1 wherein said hollow cannula includes a proximal portion, and further wherein said proximal portion of said cannula is receivable within a first bore formed in said handle, said bore terminating at a distal opening

adjacent to said upper surface of said handle
intermediate said first and second suture guide means.

4. A suture passer according to claim 1 wherein said first suture guide means comprises a vertically upstanding eyelet, said eyelet defining an opening oriented transversely to said handle, and a passageway into said eyelet adjacent to the distalmost point of attachment of said eyelet to said handle, said passageway being sized to receive a transverse cross-section of said surgical suture therethrough.

5. A suture passer according to claim 1 wherein said second suture guide means comprises a semi-cylindrical member connected to said upper surface of said handle, wherein an axial bore extends longitudinally through said semi-cylindrical member, a top slot extends down into said member transverse to the longitudinal axis of the handle, a right side slot extends between the member's distal end and said top slot, and a left side slot extends between the member's proximal end and said top slot.

6. A suture passer according to claim 3 wherein said means for releasably, lockingly maintaining said cannula in a fixed position relative to said handle comprises:

a thin radial fin extending outwardly from said proximal portion of said cannula;

a longitudinal slot extending into said distal end of said handle and communicating with said first bore,

said slot including a pair of side walls separated by a gap slightly larger than the thickness of said fin; and means for restricting axial movement of said cannula relative to said handle;

whereby said fin may slide into said slot as said proximal portion of said cannula is engaged in said first bore.

7. A suture passer according to claim 6 wherein said means for restricting axial movement of said cannula relative to said handle comprises:

a tab extending proximally from said fin, said tab including at least one tab projection defining a distally facing tab shoulder;

a proximal end of said slot;

a cavity in said handle located immediately proximally of said slot, said cavity having sidewalls defining at least one sloping, inwardly extending sidewall projection defining a proximally facing sidewall shoulder; and

said tab being configured to enter said cavity as said cannula is inserted into said first bore and said fin slides into said slot, such that said at least one distally facing tab shoulder will form a snap lock engagement against said at least one proximally facing sidewall shoulder.

8. A suture passer according to claim 7 wherein a second bore extends axially and proximately through said handle, from said cavity to said proximal end of said handle and a release rod is slidably mounted in

said second bore for reciprocal movement between a distalmost position and a proximalmost position, said release rod having a proximal portion extending proximally of said proximal end of said handle and a distal end, whereby distal movement of said proximal portion of said release rod will cause said release rod to move from said proximalmost position toward said distalmost position so that said distal end of said release rod will deflect said tab laterally so as to disengage said at least one distally facing tab shoulder from said lock engagement with said at least one proximally facing sidewall shoulder.

9. A suture passer according to claim 8 wherein said release rod comprises a bevelled distal end.

10. A suture passer according to claim 8 wherein said release rod comprises a drive surface proximal to its bevelled surface, and further wherein distal movement of said proximal portion of said release rod from said proximalmost position to said distalmost position will cause said drive surface to engage said tab and move said cannula distally after said at least one distally facing tab shoulder is disengaged from said at least one proximally facing sidewall shoulder.

11. A suture passer according to claim 8 wherein said release rod is biased toward its proximalmost position.

12. A suture passer according to claim 1 wherein

said cannula is sharply pointed at its distal end.

13. A suture passer according to claim 12, wherein said cannula is rounded off at the heel of its tip so as to minimize the possibility of damaging suture during a tissue piercing operation.

14. A method for passing suture through tissue comprising the steps of:

(a) providing a length of suture;

(b) providing a suture passer comprising:

a longitudinally extending hollow cannula having a central passage slidably receivable of a surgical suture;

a manually graspable handle adapted to engage said hollow cannula for manipulation thereof, said handle having a distal end, a proximal end, and an upper surface;

first suture guide means connected to said upper surface of said handle proximate to said distal end of said handle for releasably, guidingly holding said surgical suture;

second suture guide means connected to said upper surface of said handle proximal to said first suture guide means for releasably, guidingly holding said surgical suture; and

locking means for releasably, lockingly maintaining said cannula in a substantially fixed position relative to said handle.

(c) threading said length of suture through said said cannula from its proximal end to its distal end;

(d) inserting said pointed distal end of said cannula through said tissue;

(e) withdrawing said cannula from said tissue, leaving said suture extending through said tissue; and

(f) disengaging said suture from said first and second guide members.

15. A method for passing suture through tissue according to claim 14 wherein said distal end of said cannula is sharply pointed, the heel of its tip is rounded off, and one end of said suture extends out of the distal end of said cannula during insertion of said cannula through said tissue.

16. A method for passing suture through tissue according to claim 14 wherein the two free ends of said suture are contained in the body of said cannula during insertion of said cannula through said tissue.

17. A method for passing suture through tissue according to claim 14 wherein the intermediate portion of the suture is contained in the body of said cannula during insertion of said cannula through said tissue, with the two free ends of the suture exiting the proximal end of the cannula.